

BookletChart™

Lake Michigan – Waukegan to South Haven

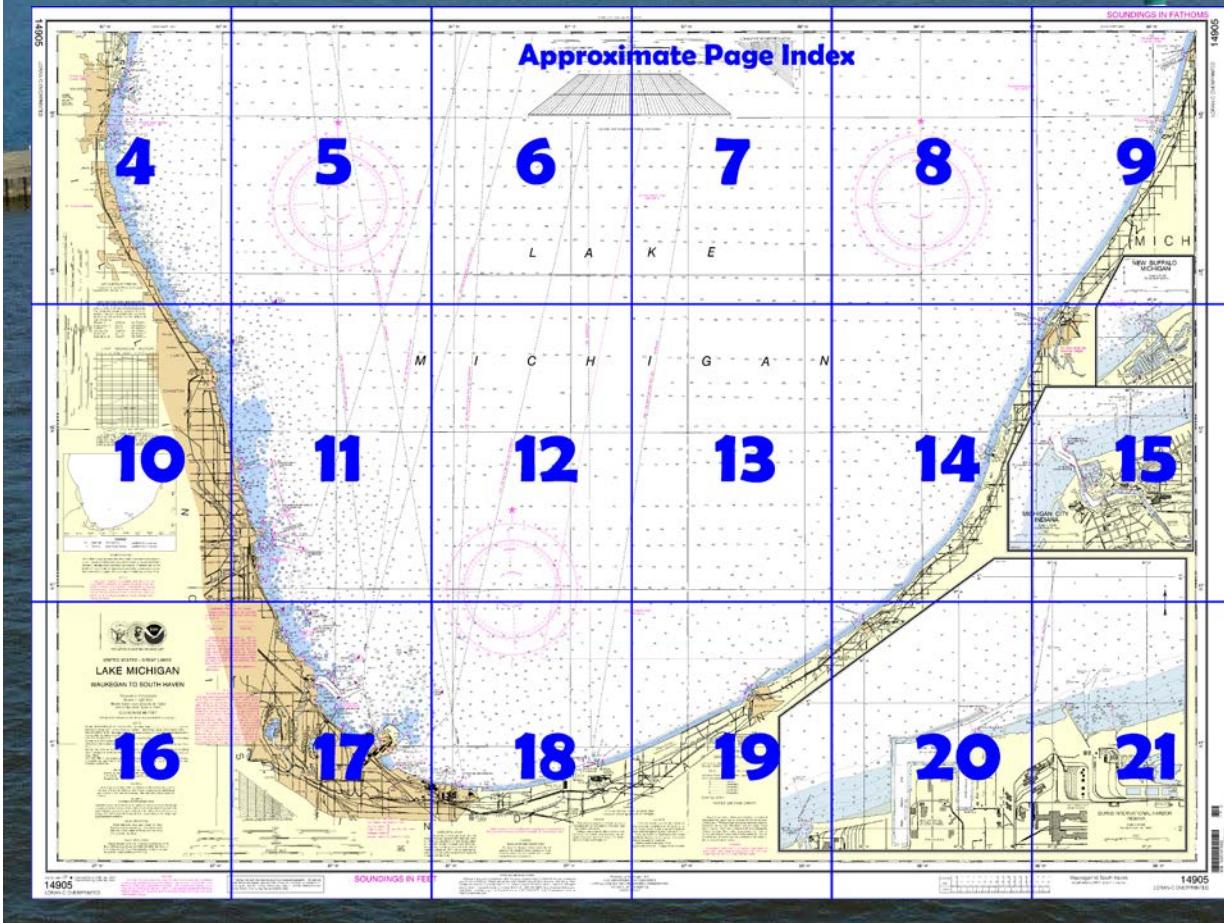
NOAA Chart 14905

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

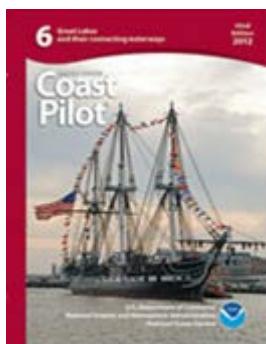
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=149_05



(Selected Excerpts from Coast Pilot)
The **St. Joseph River** flows into Lake Michigan 22 miles SSW of South Haven and 107 miles S of Little Sable Point. The port cities of **St. Joseph, Mich.**, and **Benton Harbor, Mich.**, are on the W and E sides of the river, respectively.
Joseph North Pierhead Light (42°07.0'N., 86°29.7'W.), 31 feet above the water, is shown from a white cylindrical tower on the outer end of the N pier; a fog signal is at the light. This light is sometimes obscured by city lights in the background.

Michigan City, Ind. **Caution.**—Strong NNW winds may cause large swells in the outer harbor and the entrance channel. Under heavy sea conditions, small craft are advised to use extreme caution when transiting this area.

Burns International Harbor. The Indiana Port Commission has constructed a bulkhead and fill in the area between East Harbor Arm and West Harbor Arm, and Bethlehem Steel Corporation has constructed a bulkhead and fill that extends about 1 mile E of the harbor entrance. These bulkheads are riprapped with stone. Mariners are advised to exercise caution when navigating in this area.

Dangers.—A submerged pipe, covered 1½ feet, has been reported about 125 feet N of the light marking the N side of the harbor entrance. Indiana Harbor. **Caution.**—A floating oil boom is permanently moored across Lake George Branch just above the dredged channel.

Dangers.—Several shoals are in the approach to Calumet Harbor. A rocky bank with a least depth of 21 feet is 1 mile NE of Calumet Harbor Breakwater South End Light. A lighted buoy at the SE end of the ledge marks the N side of the dredged approach channel. Two 23-foot spots and a 27-foot spot, 2 to 2.5 miles NE of Calumet Harbor Light, are marked on the E side by a lighted bell buoy. **Calumet Bar**, an extensive area with depths of 22 to 24 feet, is on the NE side of the breakwater and extension.

Fluctuations of water level.—In addition to the normal fluctuations which affect Lake Michigan somewhat uniformly, local oscillations of up to 2 feet above or below Low Water Datum are reported to have durations of a few minutes to a few hours. These changes are produced by winds and barometric pressure changes which accompany storms. Strong sustained winds may also affect the water levels for as long as a day.

Caution.—Since the opening of Calumet Sag Channel, the Calumet River has a gentle flow away from Lake Michigan except at times of sudden fluctuations of water levels from heavy rains and/or flooding.

Anchorages.—General and small-craft anchorages are in Chicago outer harbor and in the small-craft basin at the SW corner of the outer harbor. (See **33 CFR 110.1, 110.83, and 110.205**, chapter 2, for limits and regulations.)

Danger.—A rock-filled pile pier 3 to 6 feet high, marked at the outer end by a private light, extends 0.5 mile E from shore into the outer harbor, parallel to and 400 feet N of the Chicago River entrance lock.

Caution.—Submerged wrecks are along the W side of North Branch Canal about 0.4 and 0.8 mile above the junction with North Branch. The northernmost wreck is marked by a buoy.

Four Mile Crib, marked by a private light with a private sound signal, is 2.6 miles ESE of Chicago Harbor Light.

Wilmette, Ill. **Caution.**—When approaching the harbor during periods of reduced visibility, mariners are cautioned against mistaking the breakwater for the N pier. Vessels approaching from the N are advised to pass well clear of the N pier before hauling around to the entrance. Waukegan, Ill. **Dangers.**—A foul area with a number of detached rock ledges is E of the harbor entrance. The area is marked by a buoy on the E side and a lighted buoy on the N side. Mariners should keep to N of the lighted buoy.

Caution.—Sudden wind direction or barometric pressure changes may cause water levels in the harbor to rise or fall as much as 3 feet in a short time.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

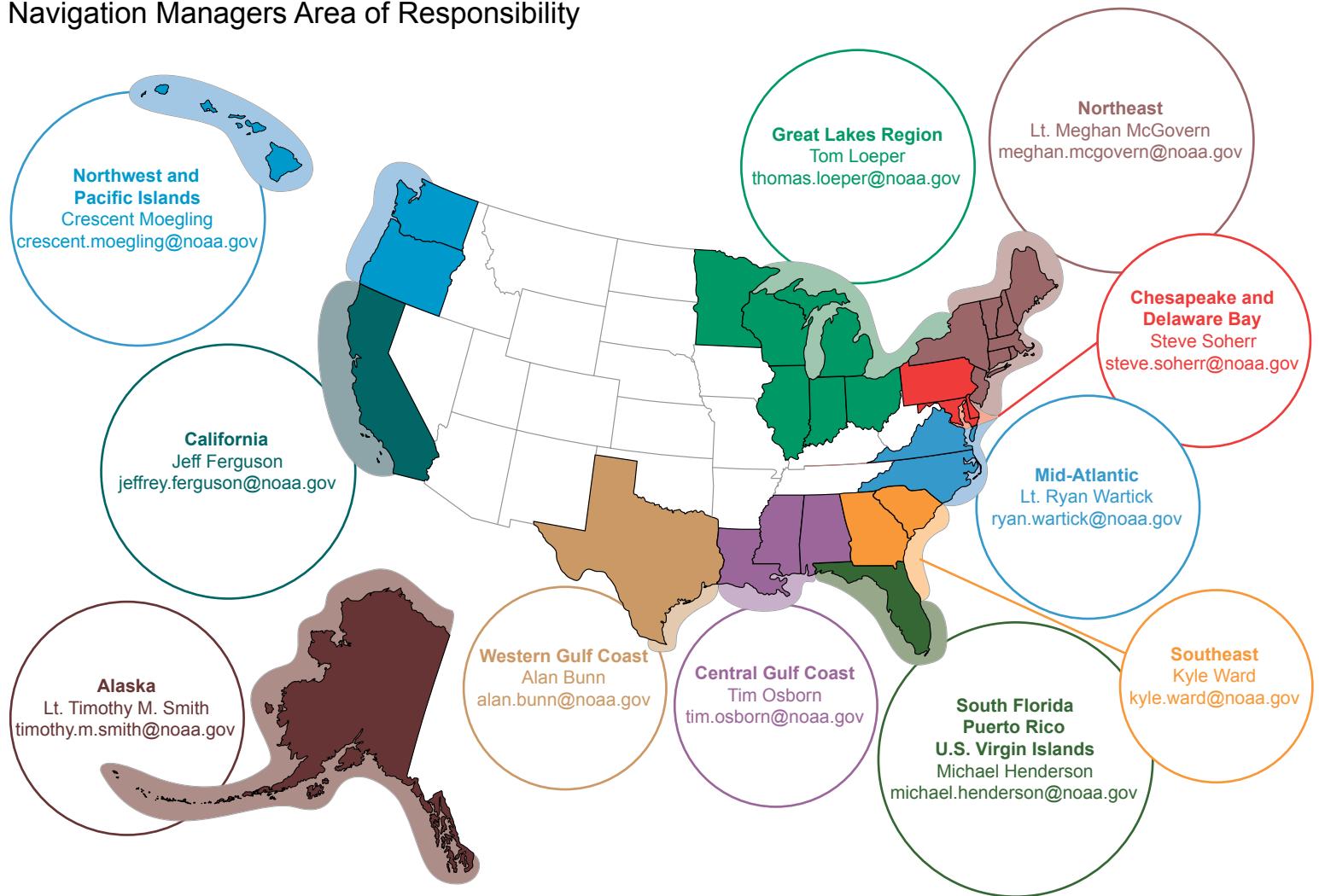
RCC Cleveland

Commander

9th CG District
Cleveland, OH

(216) 902-6117

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

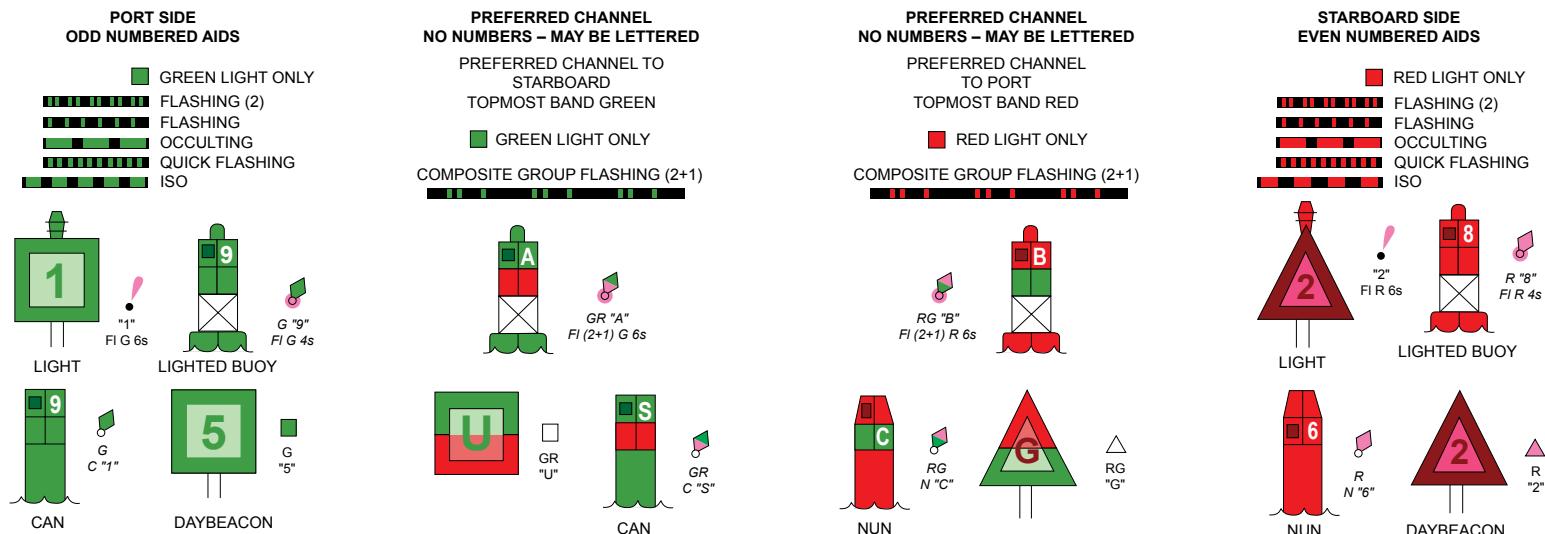
They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



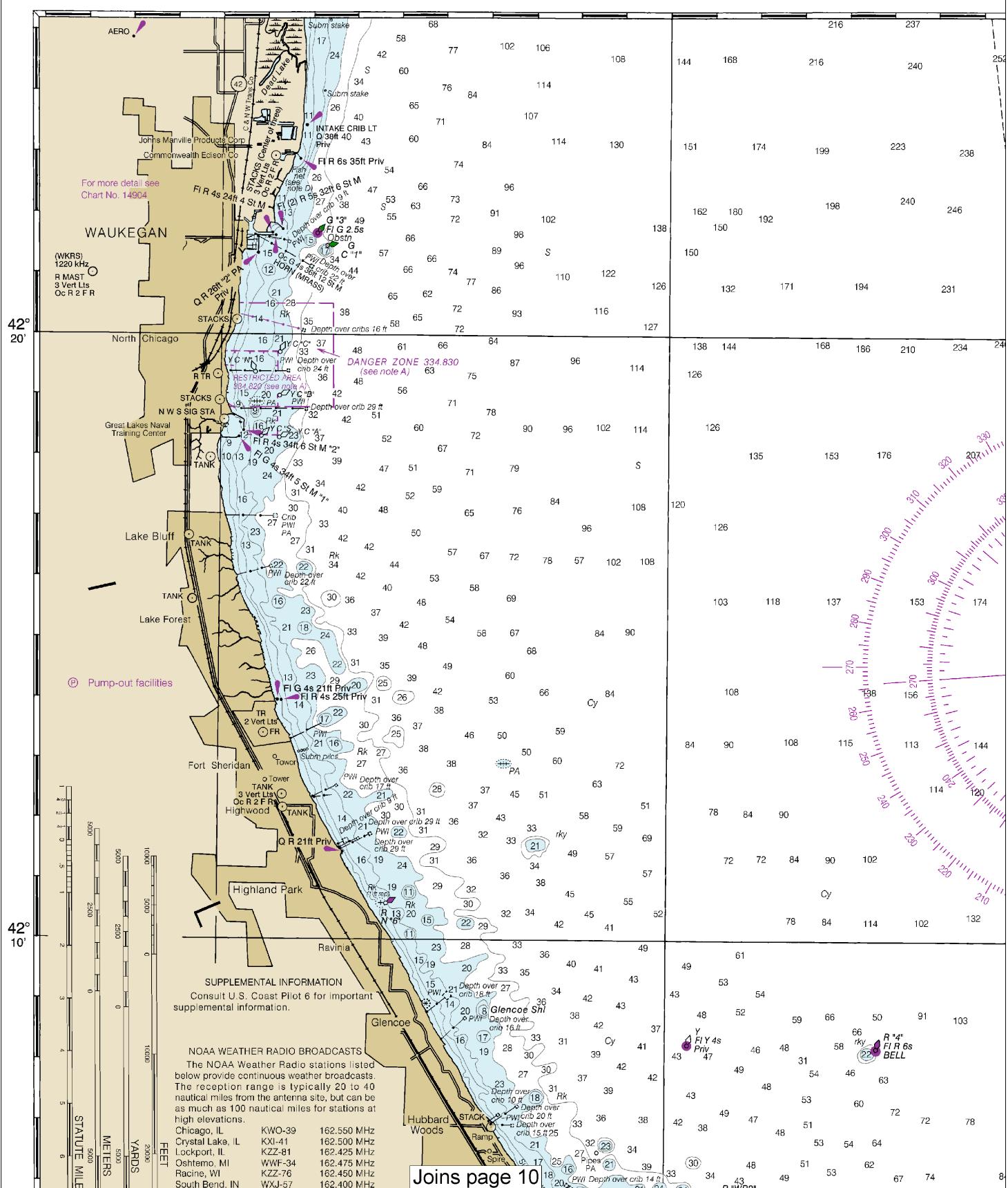
For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>

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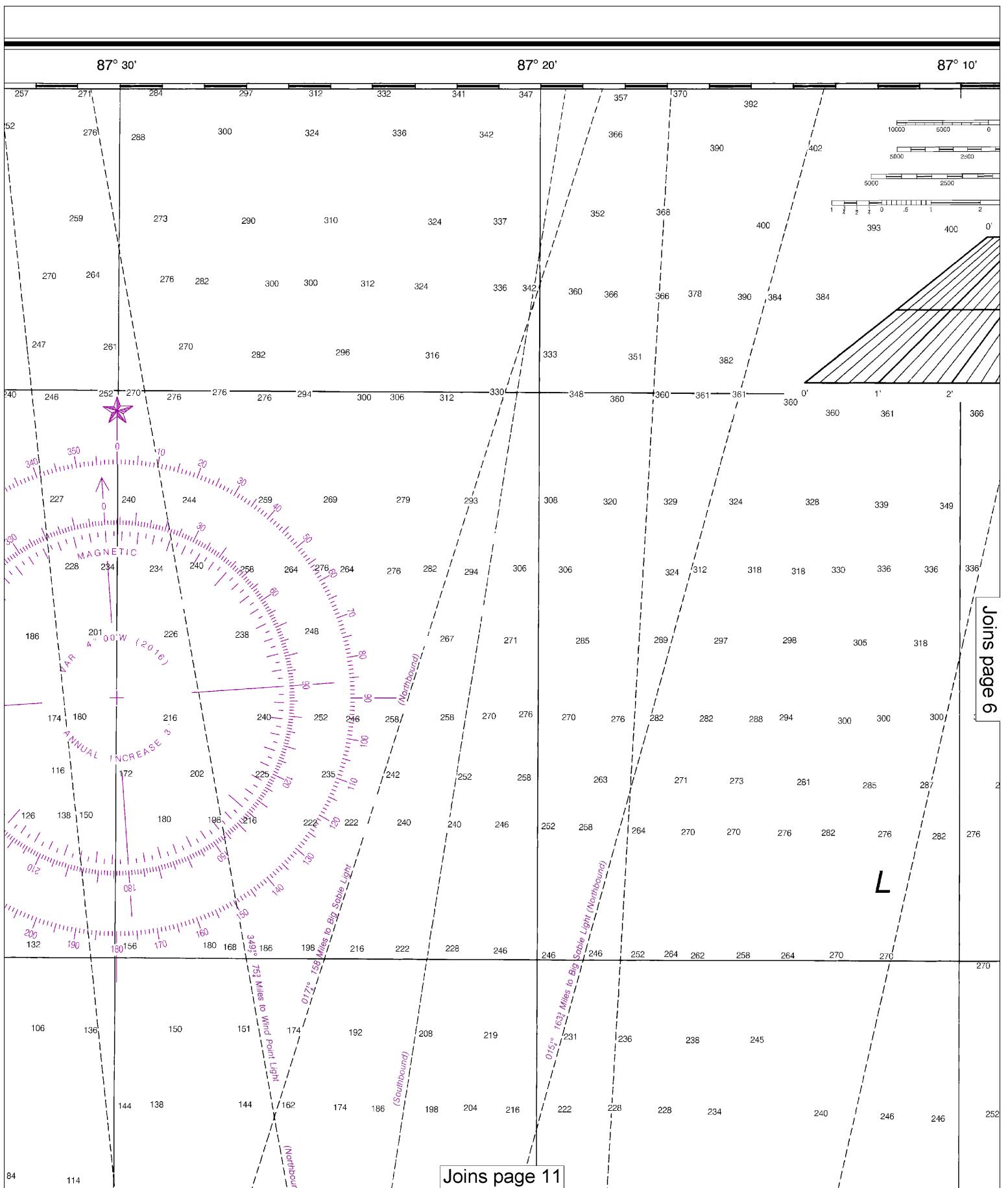
87° 50'

JOINS CHART 14904

87° 40'



4

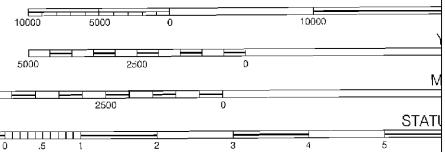


This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:160000. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

87° 20'

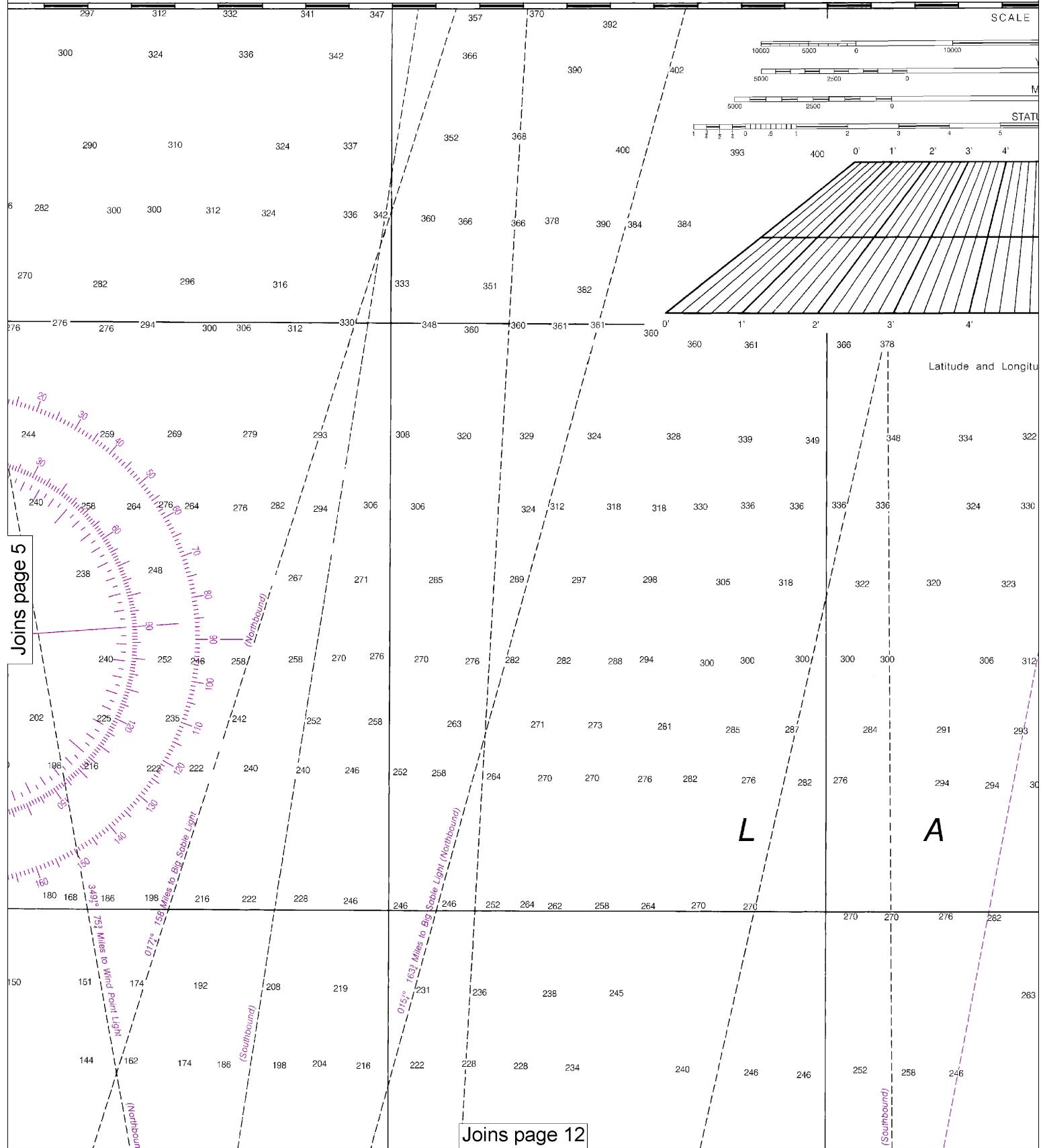
87° 10'

SCALE



STATUTE MILES

YARDS

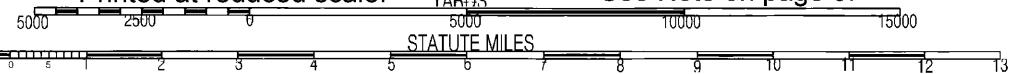


6

Note: Chart grid lines are aligned with true north.

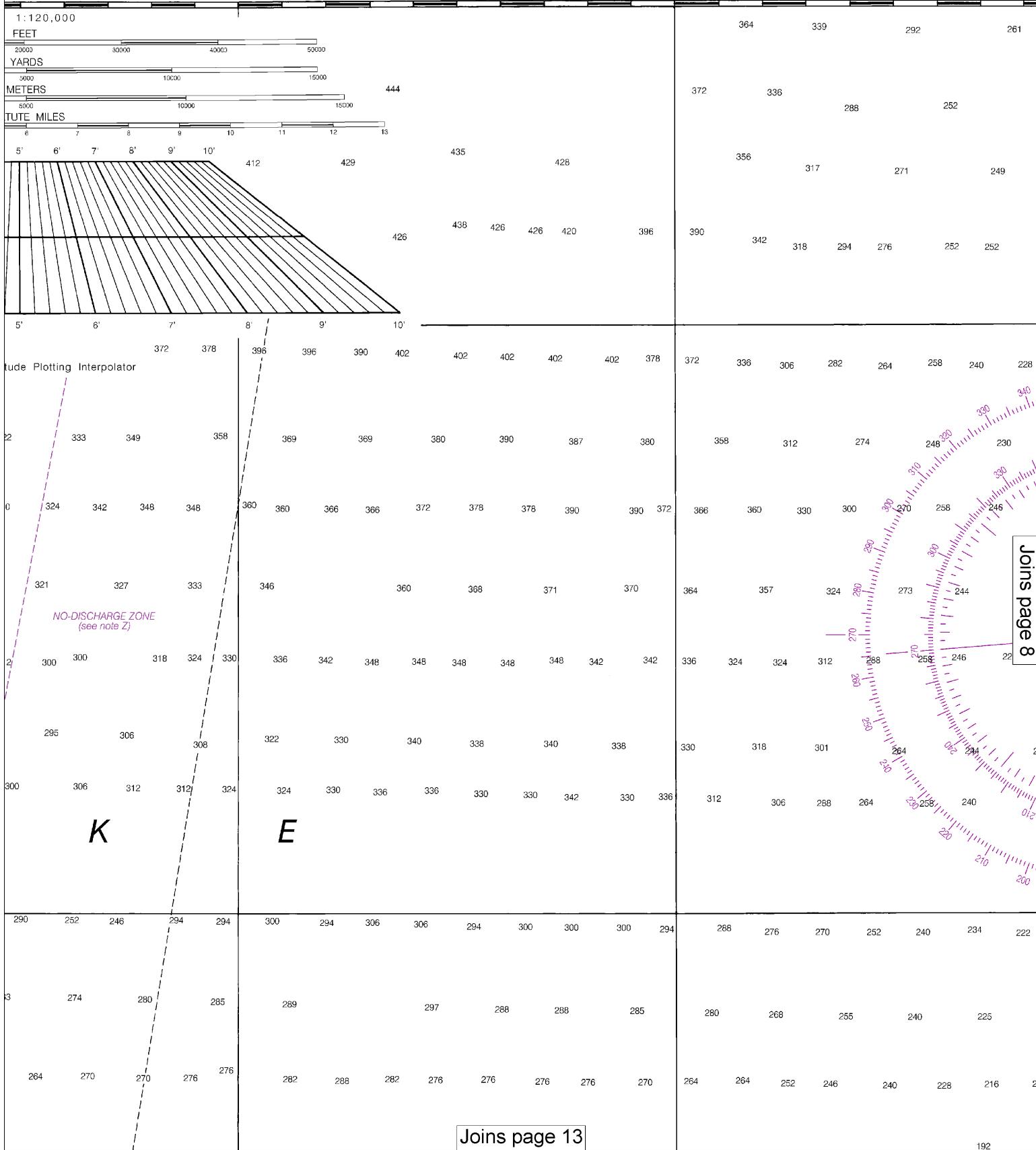
Printed at reduced scale.

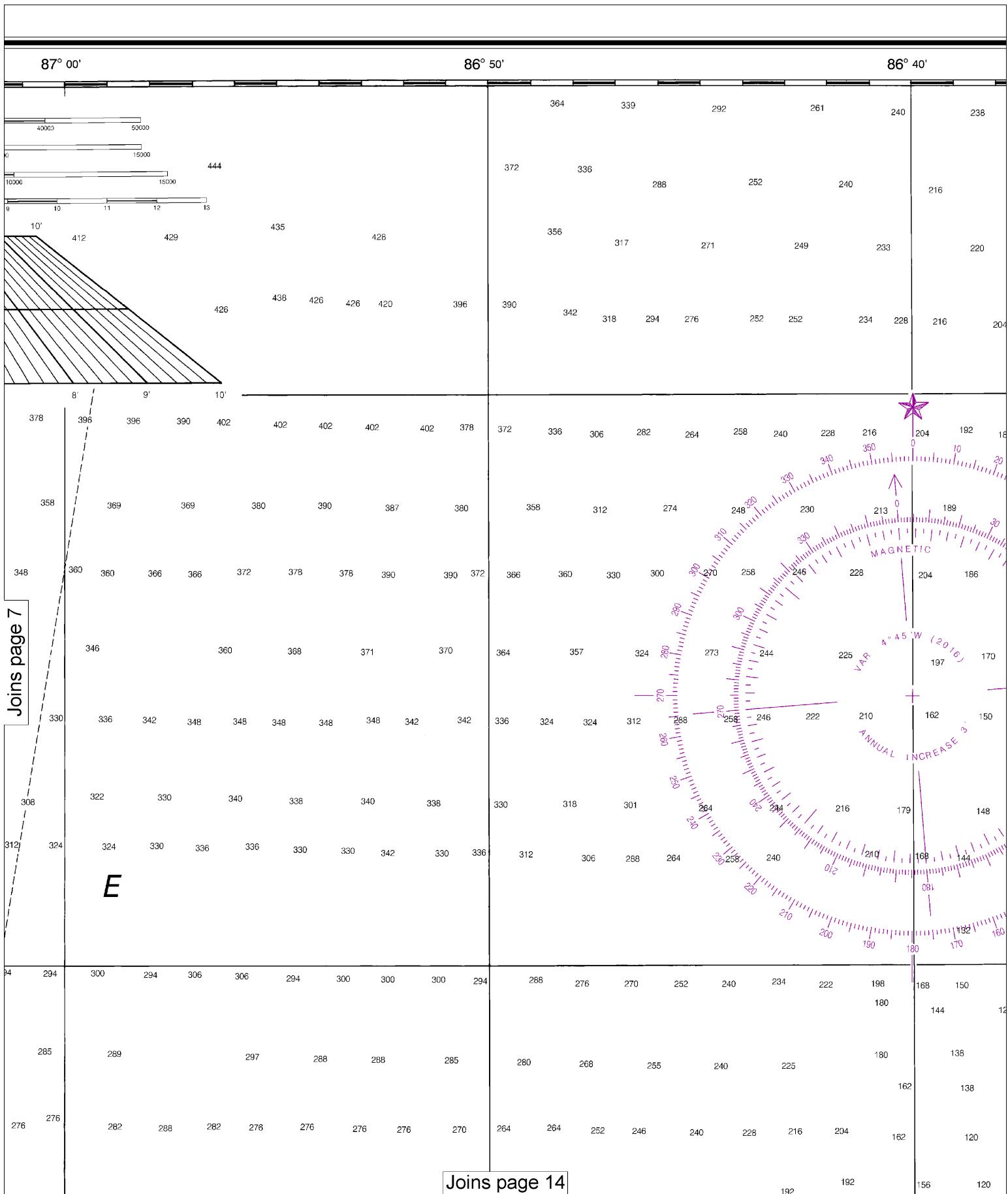
See Note on page 5.



87° 00'

86° 50'



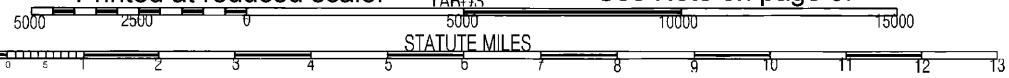


8

Note: Chart grid lines are aligned with true north.

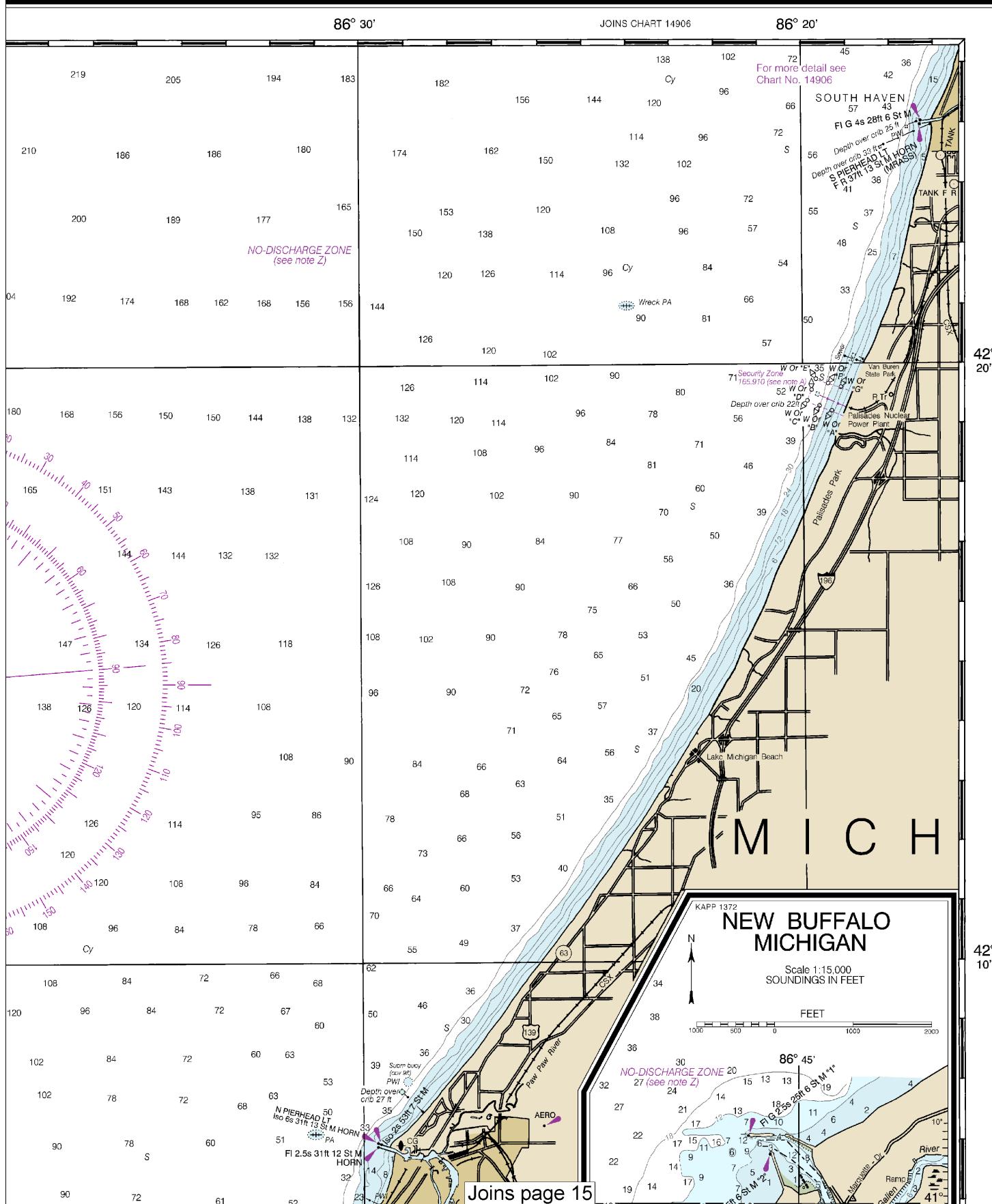
Printed at reduced scale.

See Note on page 5.

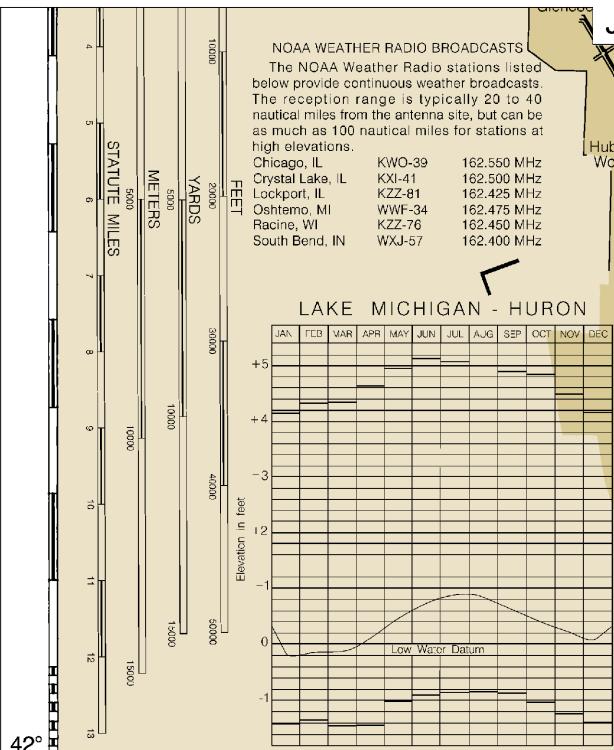


SOUNDINGS IN FEET

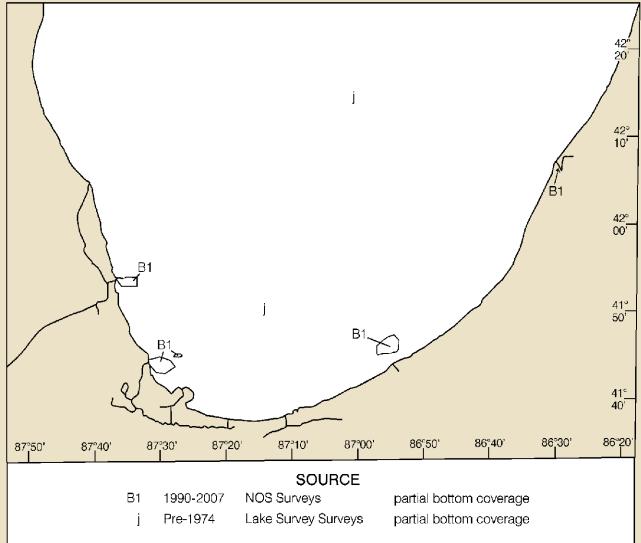
14905



Joins page 4



Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.



SOURCE DIAGRAM

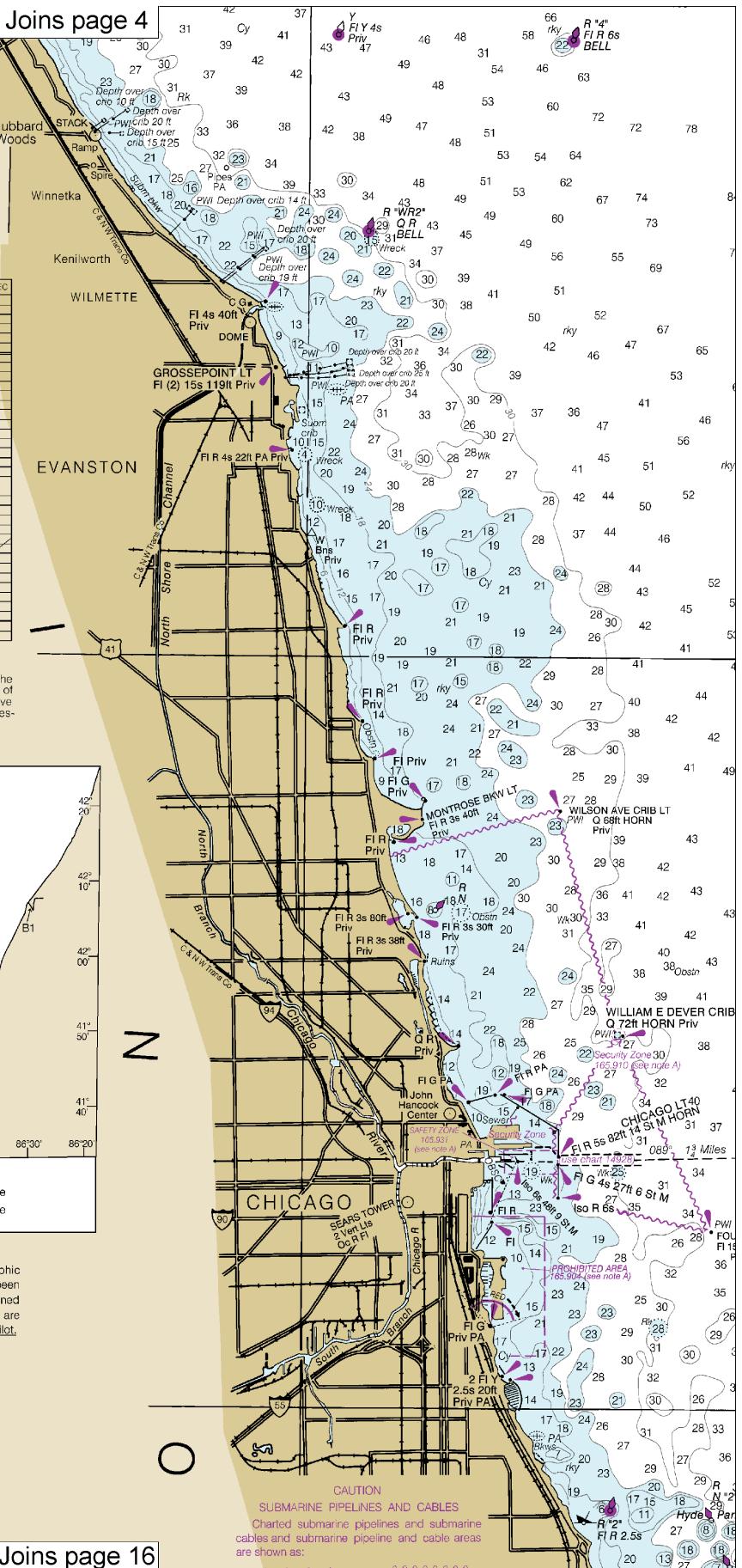
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

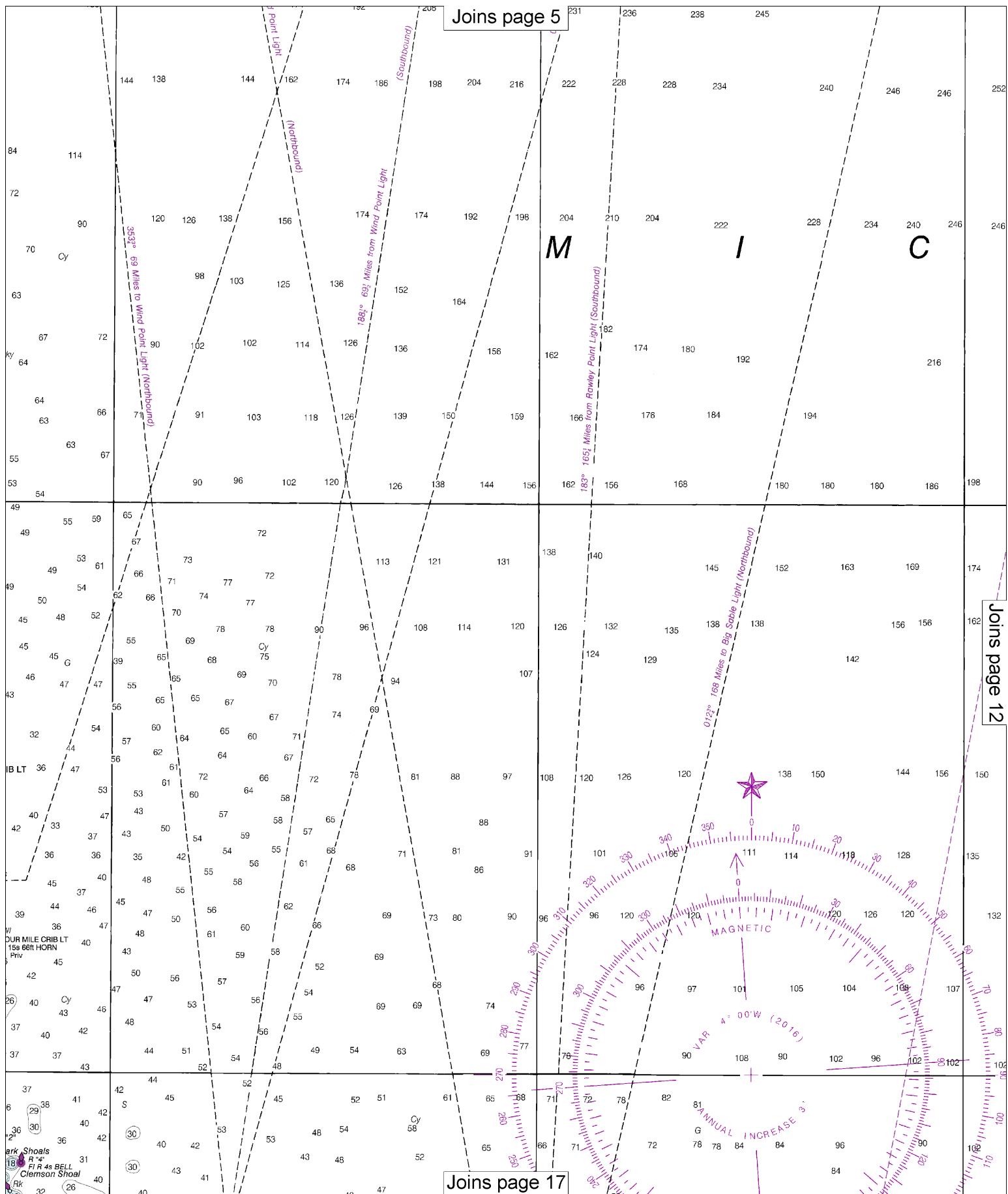
NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

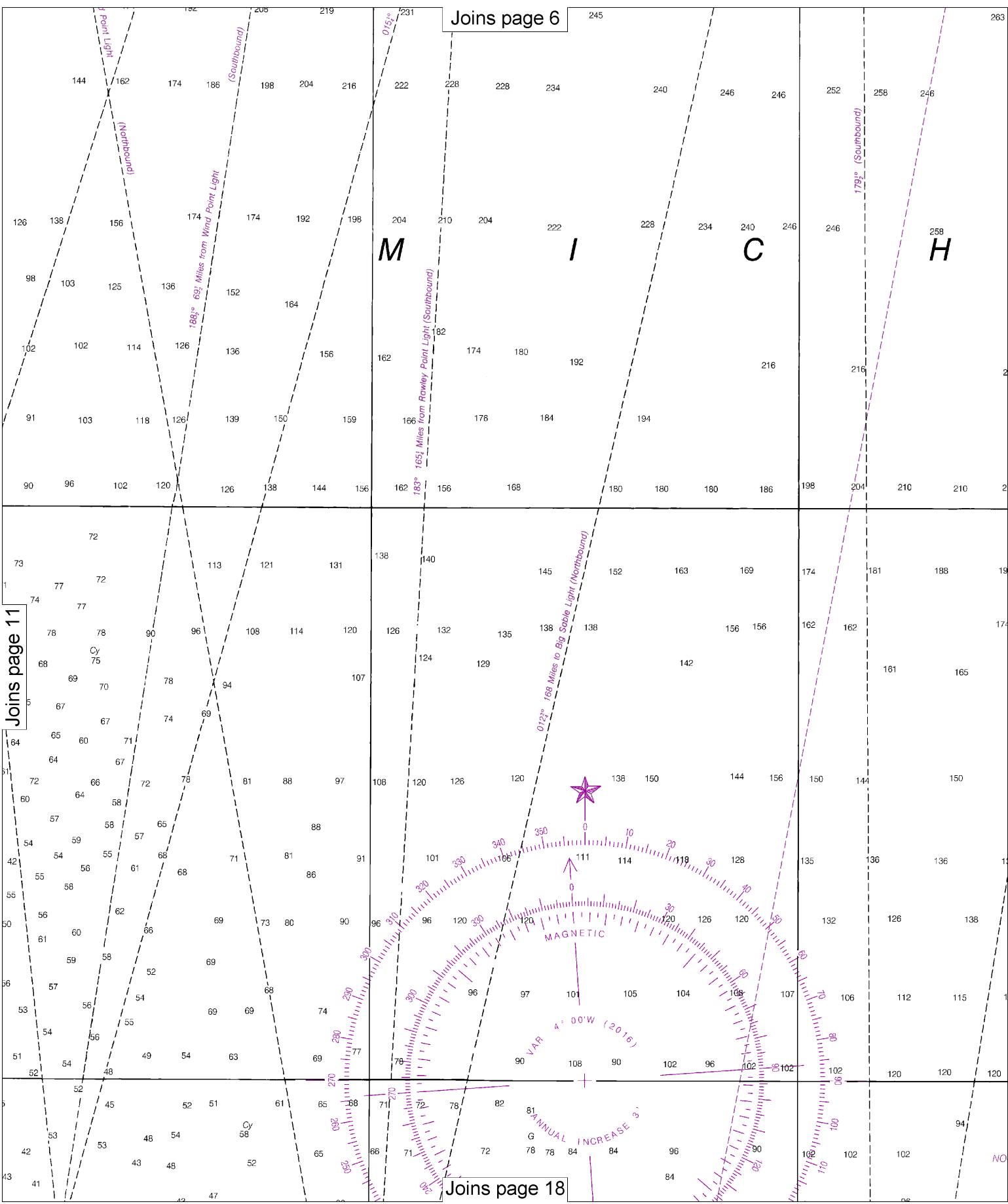
Refer to charted regulation section numbers.

Joins page 16





Joins page 6

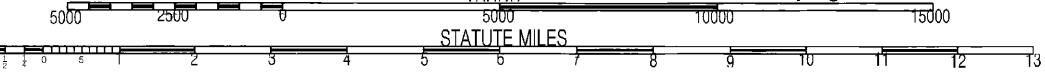


12

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.



3	274	280	285	289	297	285	280	268	255	240	225
264	270	270	276	276	282	288	282	276	276	270	264
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74	174	174	186	180	186	186	186	192	198	174	168
137	146	148	151	152	149	145	138	131	120	108	138
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91	94	93	102	96	84	84	84	72	63	60	60
O-DISCHARGE ZONE (see note Z)	84	78	S	90	78	72	72	63	64	52	52
78	78	S	78	72	66	66	66	60	53	46	46

Joins page 8

285	289	297	288	288	260	268	255	240	225	180	138
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										168	150
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										138	126
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210	210	208	206	202	198	193	184	172	161	150	102
										126	72
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										60	60
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										63	57
168	168	174	156	168	162	162	150	138	144	138	59
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										114	57
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										78	35
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										Mast PA	
										Union Pier	
										TANK	
										River	
										Galler	
										TOWER	
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											49

Joins page 20

14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

5000 2500 0

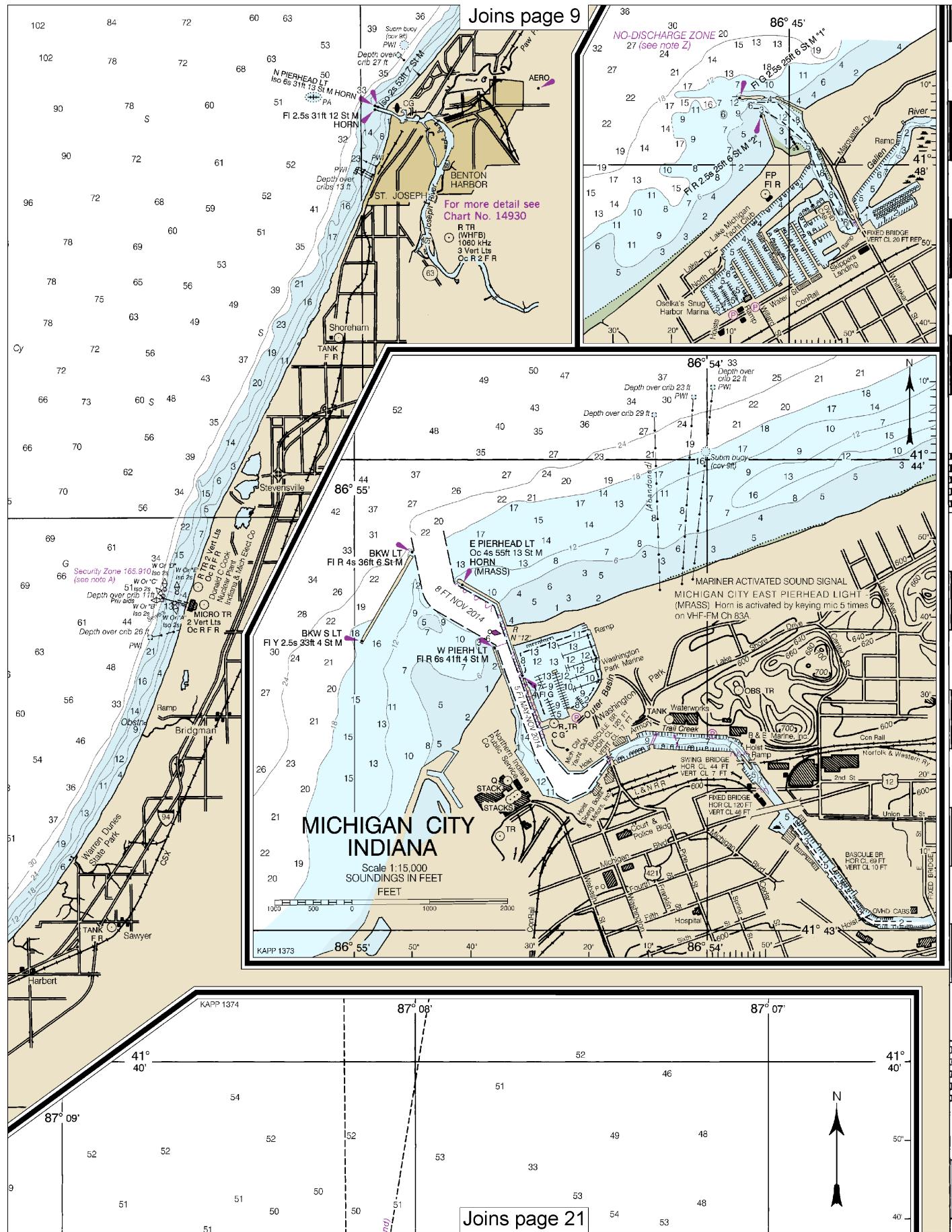
YARDS

5000 10000 15000

See Note on page 5.

STATUTE MILES

5 6 7 8 9 10 11 12 13



41°
50'

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

Refer to charted regulation section numbers.



Joins page 10

UNITED STATES - GREAT LAKES LAKE MICHIGAN WAUKEGAN TO SOUTH HAVEN

Polyconic Projection
Scale 1:120,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov.

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 577.5ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

NOTE D

Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

POTABLE WATER INTAKE (PWI)

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93) Consult U.S. Coast Pilot 6 for important supplemental information.

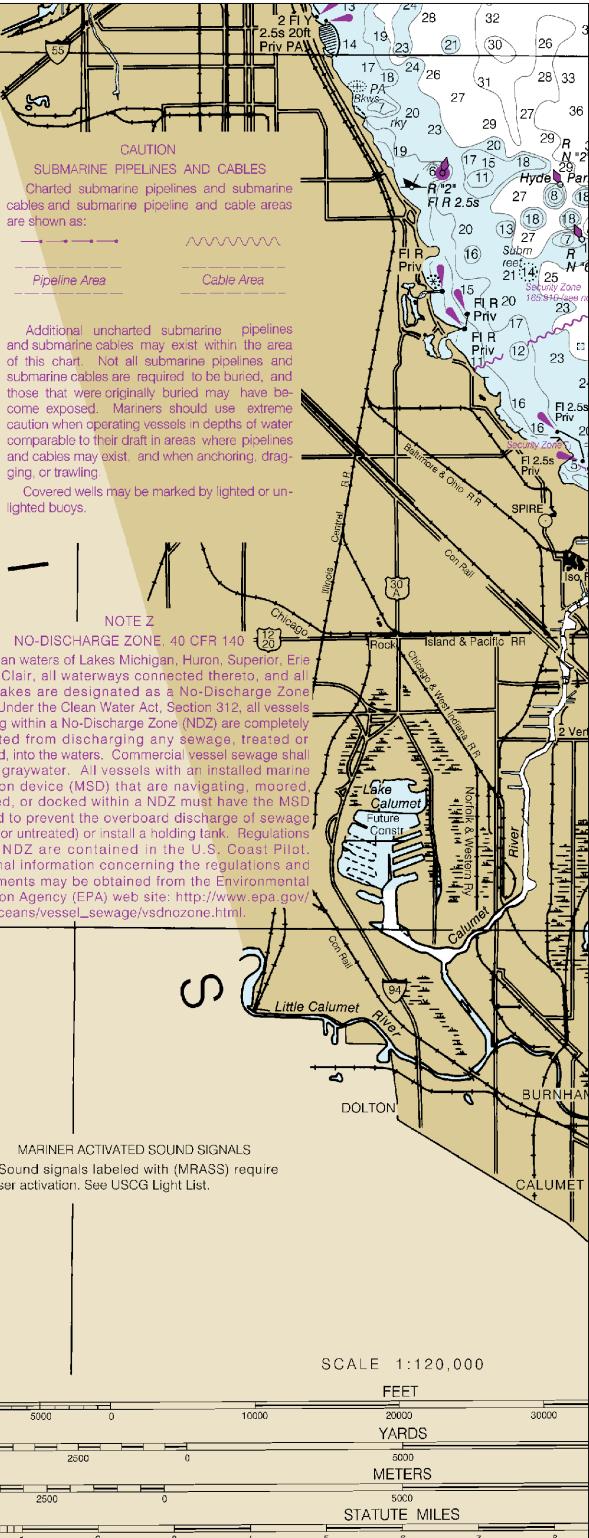
RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

87° 50'



87° 40'

14905

CAUTION
This chart has been corrected from the Notice to Mariners (N) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

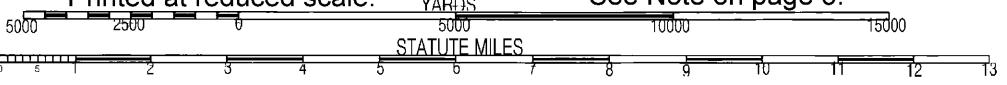
NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

32nd Ed., Dec. 2016. Last Correction: 12/9/2016. Cleared through:
LNM: 4916 (12/6/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

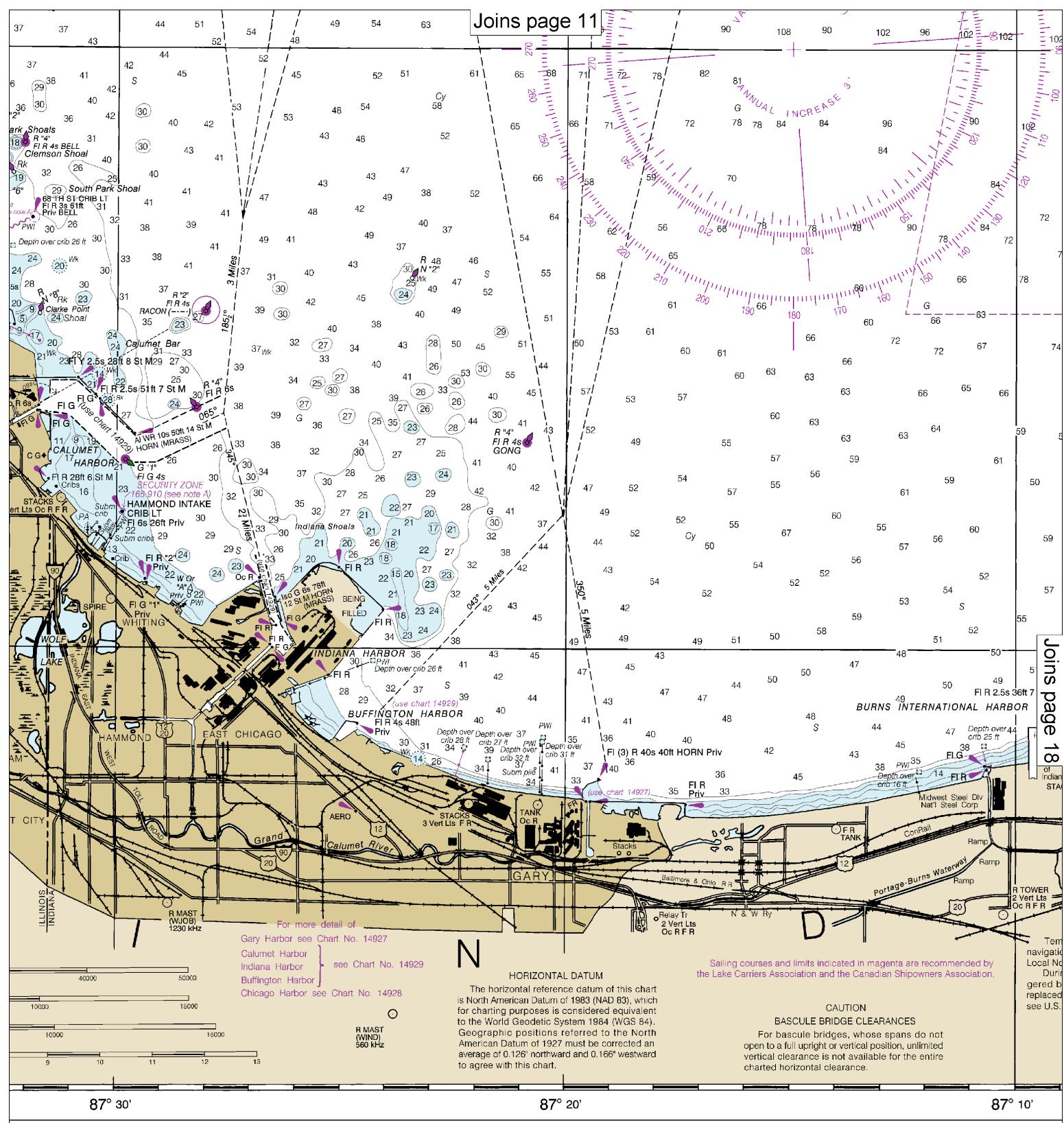
16

Note: Chart grid lines are aligned with true north.

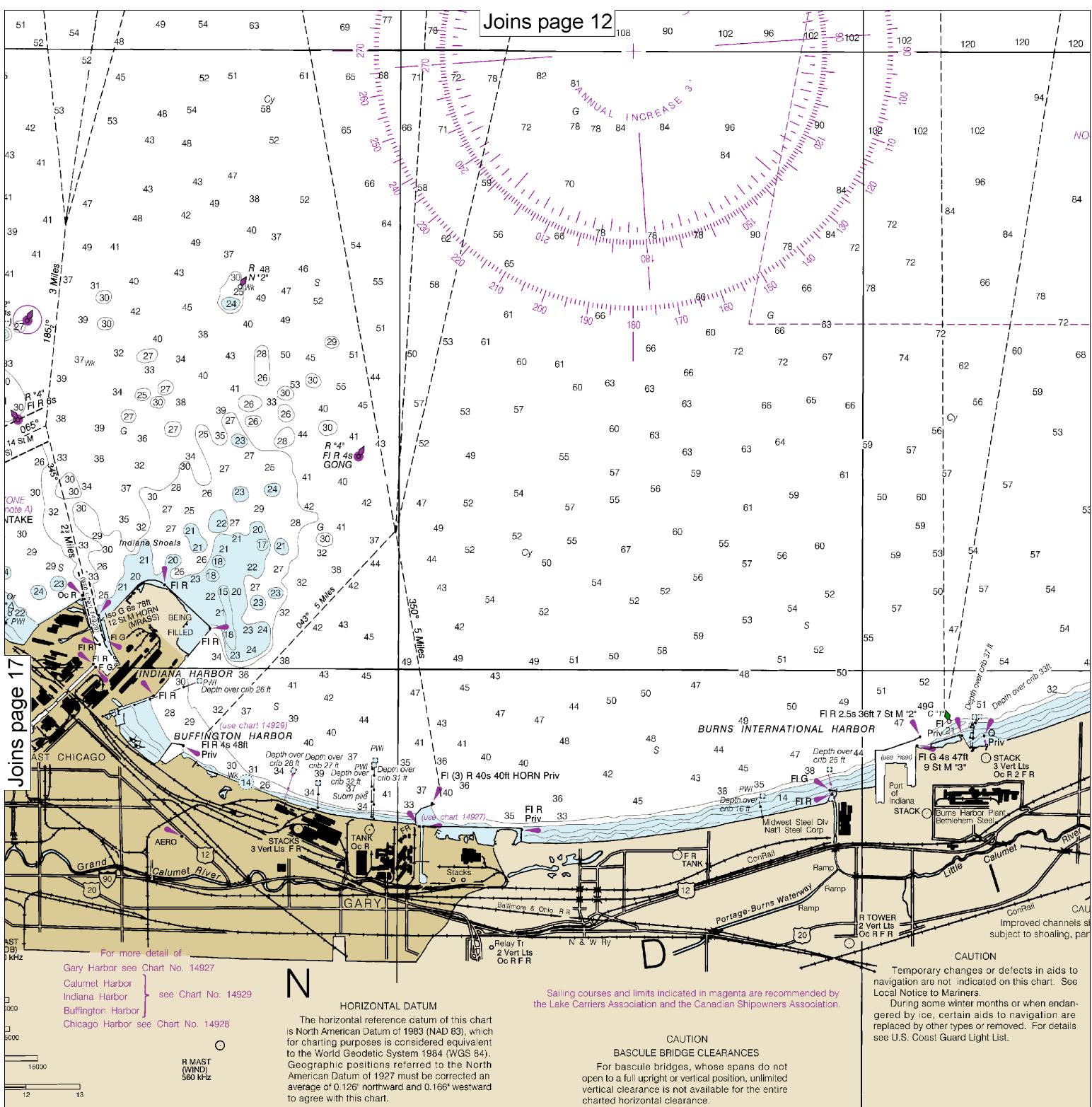
Printed at reduced scale.



See Note on page 5.



SOUNDINGS IN FEET



SOUNDINGS IN FEET

Published at
U.S. DEPARTMENT OF
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL COASTAL SURVEY

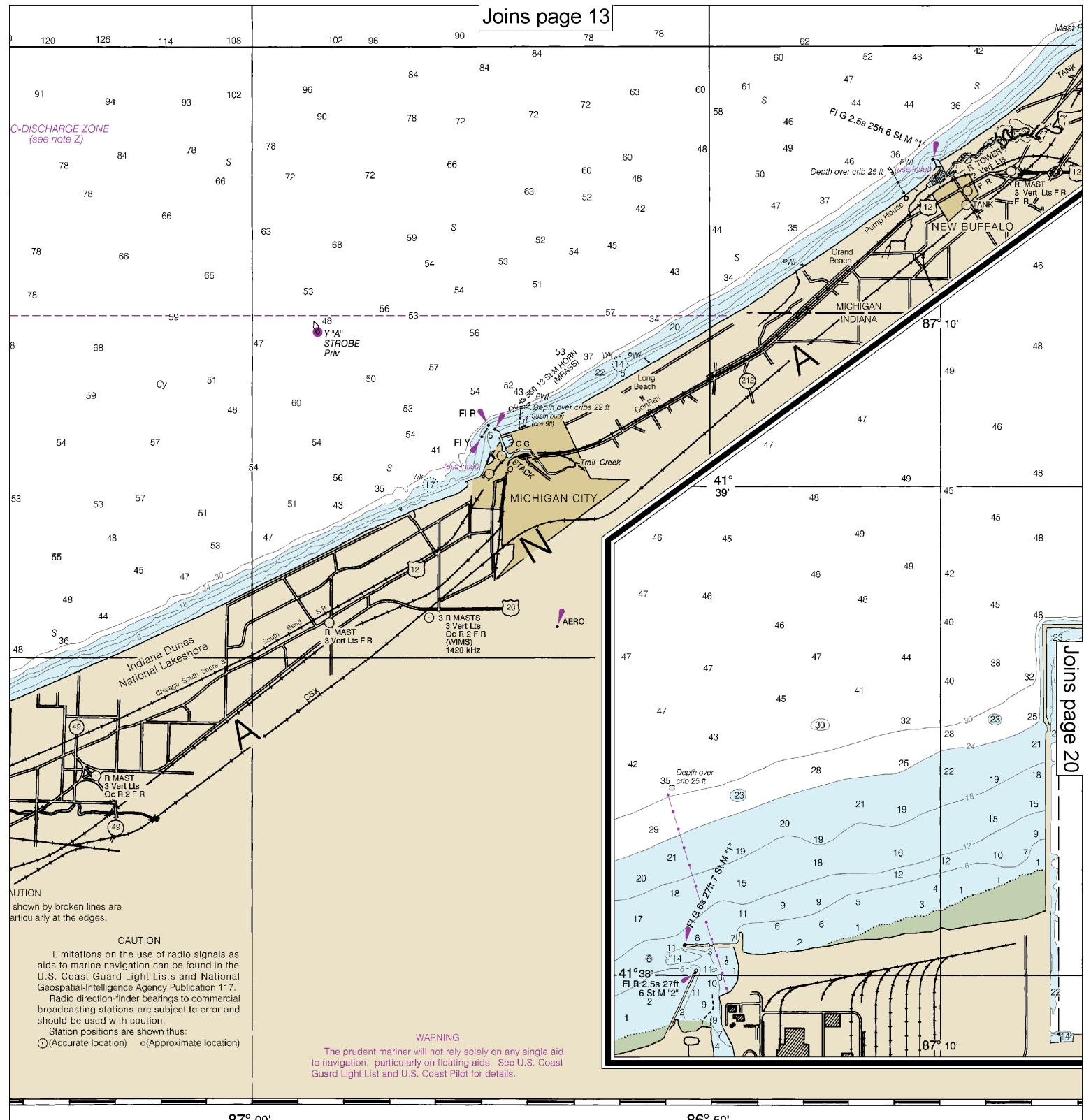
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Note: Chart grid lines are aligned with true north.

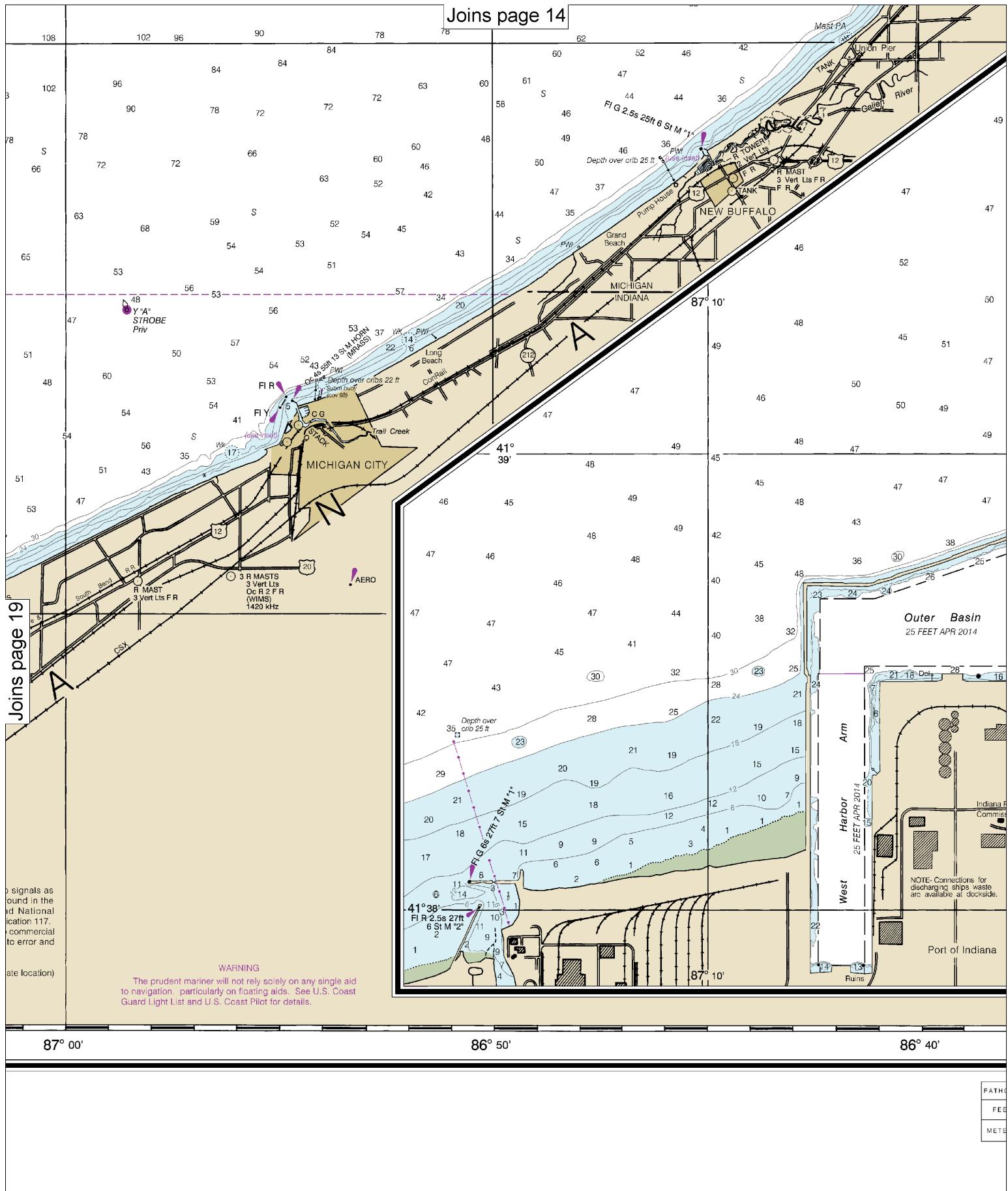
Printed at reduced scale.

See Note on page 5.





1 Washington, D.C.
ENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
ST SURVEY



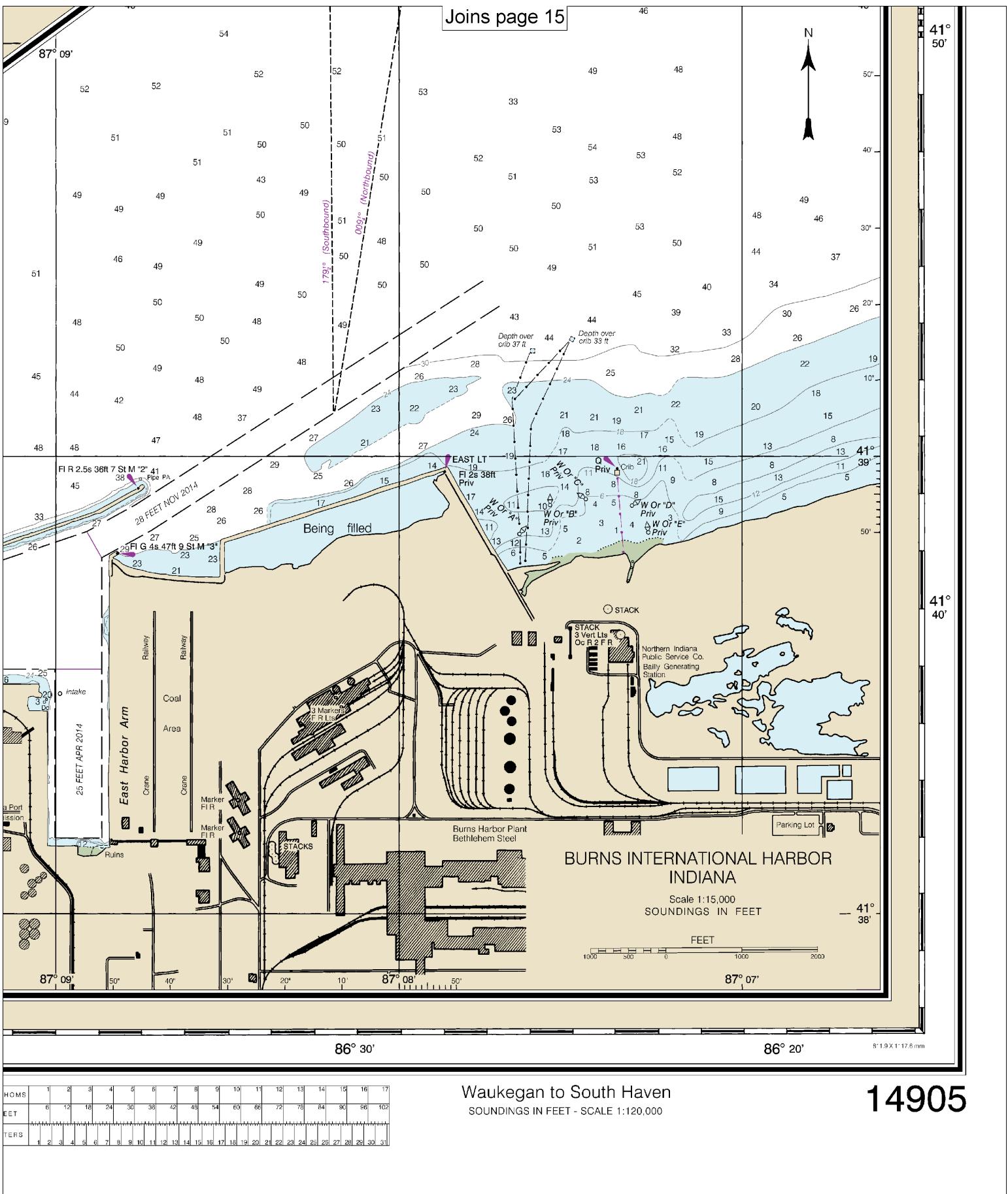
20

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.

5000 2500 0 5000 10000 15000
STATUTE MILES





EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information

— <http://www.nauticalcharts.noaa.gov>

Interactive chart catalog

— <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>

Report a chart discrepancy

— <http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx>

Chart and chart related inquiries and comments

— <http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>

Chart updates (LNM and NM corrections)

— http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html

Coast Pilot online

— <http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm>

Tides and Currents

— <http://tidesandcurrents.noaa.gov>

Marine Forecasts

— <http://www.nws.noaa.gov/om/marine/home.htm>

National Data Buoy Center

— <http://www.ndbc.noaa.gov/>

NowCoast web portal for coastal conditions

— <http://www.nowcoast.noaa.gov/>

National Weather Service

— <http://www.weather.gov/>

National Hurricane Center

— <http://www.nhc.noaa.gov/>

Pacific Tsunami Warning Center

— <http://ptwc.weather.gov/>

Contact Us

— <http://www.nauticalcharts.noaa.gov/staff/contact.htm>



For the latest news from Coast Survey, follow @NOAAcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.